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THESIS

SOCIOECONOMIC REPRESENTATIVENESS
AND THE DRAFT

by

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June 1980

Thesis Advisor:

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They consistently compare the education, race and mental abilities of today's All-Volunteer Force (AVF) entrants with the same qualities of those who enlisted (or were inducted) during the conscription years. A more helpful comparison would be to compare the socioeconomic characteristics of today's force with the characteristics that would be present if conscription were still being used.

This thesis sets the frame for that analysis examining military representativeness during the Vietnam draft years, comparing it to the socioeconomic and quality characteristics of the general population of the same period. It tracks a cohort of young men, 14 to 17 years of age in 1966, through a period of seven draft years (1966 to 1973).

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Socioeconomic Representativeness and the Draft

by

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Lieutenant Commander, United States Navy
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requirements for the degree of

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The debate concerning America's All-Volunteer Force, seven years after the elimination of the peacetime draft in June 1973, is more controversial than ever before. It is argued that the "quality" of recruits who enter the services (especially the Army) is of lower caliber than historically experienced. Proponents of conscription contend that the quality of accessions is not representative of the population at large. They consistently compare the education, race and mental abilities of today's All-Volunteer Force (AVF) entrants with the same qualities of those who enlisted (or were inducted) during the conscription years. A more helpful comparison would be to compare the socioeconomic characteristics of today's force with the characteristics that would be present if conscription were still being used.

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I. HISTORY OF THE DRAFT

The generations of people living in the United States today are survivors of an era of history during which conscription had been integrated into America's way-of-life. With the enactment of the Selective Service Act of 1917, our country developed the policy that manpower procurement to maintain a large military force during wartime should be heavily dependent on conscription. Since those early days of World War I, there has been considerable opposition to the draft, especially when considering peacetime conscription. The strength of the argument for the draft was held to be that all eligible men would serve in some way.

Historically, the use of the draft in the United States has been more the exception than the rule. In fact, until the Civil War, nation-wide military conscription was unheard of in America. During the Revolutionary War some colonies did resort to the use of conscripts to fill their militia, but, despite the efforts of George Washington and the Continental Congress, national conscription was never implemented. In the War of 1812, an executive request by President Madison for federal legislation to draft male citizens into mandatory service met with such strong opposition that the war was over before any action was completed in Congress.

With the onset of the Civil War, volunteers flooded both the armies of the North and the South. By mid 1862, however, the South had to resort to compulsory conscription to fill its dwindling forces and within a year the Union did likewise. The Conscription Act of 1863, the nation's first compulsory military service law, required all men between 20 and 45 years of age to register for the draft. However, under this law, any prospective conscript was allowed the opportunity to buy temporary exemption from the Army for the sum of \$300, or he could be permanently exempt if he hired a substitute to fight in his place. These exemptions brought about inequities in favor of the rich which were partly responsible for subsequent bloody riots and violence.

Conscription was dropped after the Civil War, not to be revived again until 1917, the year the United States entered World War I. Widely attacked as unconstitutional, the Selective Service Act of 1917 established a broad system of local selective service boards. Within three weeks of passage, 10 million men were registered for the draft. The legislation provided for classification of male registrants "into one of five categories according to their 'value' to the civil sector."¹ Class I contained those men of least value, thereby allowing them to be inducted first. "This, of course, led to an

¹ Cooper, R.V.L., Military Manpower and the All-Volunteer Force (R-1450-ARPA), Santa Monica, CA: The Rand Corporation, September, 1977, p. 53.

overrepresentation of the poor and blacks, as illustrated by the fact that blacks constituted 9.6% of all registrants but accounted for 13% of the inductions."² The legislation also provided for exemptions to certain categories of conscientious objectors and certain hardship cases. In the course of the war, some 2.8 million men were drafted. Conscription was discontinued with the signing of the Armistice in 1918.

In September 16, 1940, Congress passed the Selective Service Training Act of 1940, the first peacetime draft in the nation's history. Modeled after the World War I plan, the question of compulsory service again brought about debate on the question of its constitutionality. Those opposing the draft advocated citizen's rights, while the supporters defended the position that the draft was the only equitable way to ensure a strong standing military force in which all eligible men would serve.

Initially, those inducted were required to serve for a period of one year. However, following the attack on Pearl Harbor on December 7, 1941, just as the sentiment of conscription changed so did the length of compulsory service. The period of service now was for the duration of the war plus six months.

Before the end of the war, all males between the ages of 18 and 65 were required to register and the Selective Service

² Ibid, p. 51.

Board controlled the entire military procurement procedure. Although it rarely met its monthly quota, the draft nevertheless provided some 10 million of the nearly 15 million Americans who served in World War II. It should be noted, however, there were close to 45 million registrants.

The 1940 Selective Service Act was allowed to expire in March, 1947, but with the threat of Soviet Expansion in Europe, President Truman asked for a new law which would require universal military training (UMT) for all able-bodied young men. After much debate, Congress passed the Selective Service Act of 1948, which in essence was a reenactment of the 1940 Act ruling out UMT. In January 1949, the Army ended its two-year enlistments, raised its entry standards and refused to accept married volunteers. Nevertheless, enlistments were up and only 30,000 men were inducted between June 1948 and the outbreak of the Korean War. Then in 1951, as the war entered its second year, Congress passed the Universal Military Training and Service Act, which established the Selective Service System as a permanent agency and made all males between the ages of 18 1/2 and 25 eligible for induction. The Act was extended in 1955, 1959, and 1963.

During the early 1960's, 95% of the young men between the ages of 18 and 35 were excluded from 1-A (qualified for military service) classification. There was an excess of eligible youth and the Selective Service System had problems

in allocating them. Induction standards were again increased and pay **remained** below the civilian levels. Still there were many volunteers and the draft calls remained relatively small (See Table 1). In 1963 there were only 74,000 inductions which constituted only 20% of the male non-prior service (NPS) accessions. With the increase of the United States' involvement in Vietnam, draft calls rose sharply (to a level of 103,000 in 1965) and much attention was focussed on the draft. Mounting criticism led to major changes in the Selective Service System policies. The new Military Selective Service Act of 1967 contained certain reforms; mainly in the order of selection, which was reversed to take 19 year olds and ex-college students first. Deferment criteria were also tightened. Draft calls rose to an annual high of 340,000 (or 40.9% of total male NPS accessions) in 1968, and in 1969 the lottery system was introduced. Of the 6 million men who served in the Armed Forces during the Vietnam years, 25% were draftees.³

In 1979, President Nixon proposed elimination of the peacetime draft and in 1973 the Selective Service Law lapsed giving way to a professional, All-Volunteer Force. A combination of a reduction in military manpower strength and a dramatic increase in the number of young men 19 years of age made the end of the draft a true possibility.

³ The Report of the President's Commission on an All-Volunteer Armed Force, Washington, D.C.: U.S. Government Printing Office, 1970, p. 165.

TABLE 1

Active Duty Male Enlisted NPS Accessions
Fiscal Years 1954-1973

(In thousands)

	Inductions	Enlistments	Total	%Inducted
1954	265	311	576	46.0
1957	180	277	457	39.4
1960	90	299	389	23.1
1961	60	335	395	15.2
1962	158	361	519	30.4
1963	74	296	370	20.0
1964	151	326	477	31.7
1965	103	301	404	25.5
1966	340	554	894	38.0
1967	299	461	760	39.3
1968	340	492	832	40.9
1969	265	544	809	32.8
1970	207	412	619	33.4
1971	156	375	531	29.4
1972	27	378	405	6.7
1973	36	399	435	8.3

Sources: Statistical Abstract of the United States and
OASD (MRA&L), America's Volunteers.

As shown in Figure 1, in the mid-1950's approximately 80% of the eligible young male population was required to provide the manpower strengths of the services. In the early 1960's, that requirement had dropped to about 60%, and in 1980, less than 25% will be needed. These dynamic population and military strength changes have brought the equity issue to the forefront of debate about who will serve when less than one-fourth of the eligible population is needed. The military will utilize a limited portion of the population. The question of representativeness concerns the socioeconomic characteristics of those who serve in the military vis-a-vis their contemporaries in the population.

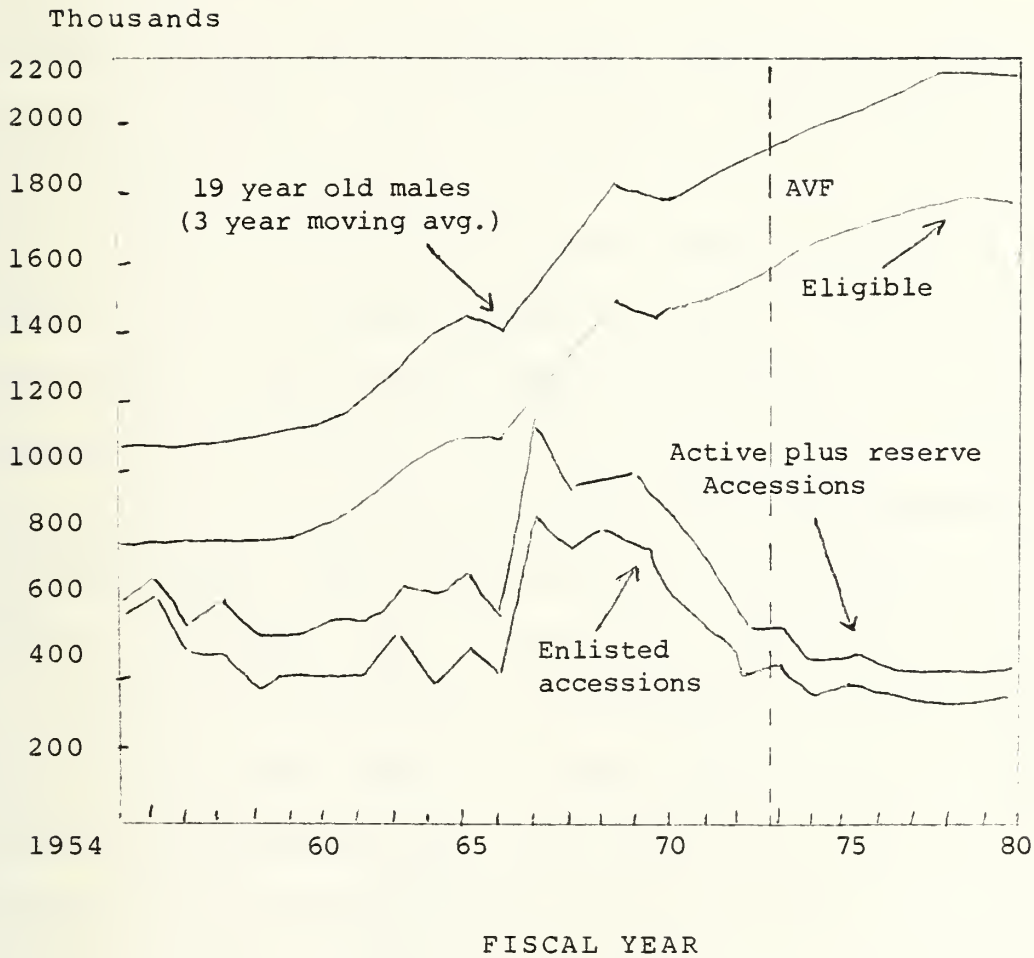


Figure 1. Supply and demand for young men

Source: Cooper, R.V.L., Military Manpower and the All-Volunteer Force.

II. LITERATURE REVIEW

The debate concerning the equity and representativeness of the draft has been one of concern since the inception of conscription in the Civil War. The Conscription Act of 1863 provided monetary and substitution exemptions by law which favored the rich. The classification system inherent in the Selective Service Act of 1917 led to an "over-representation of the poor and black,"⁴ since those individuals who were judged to be of a lesser value to society were inducted first. Subsequently, the Selective Service Training Act of 1940, the Selective Service Act of 1948, and the Universal Military Training Act of 1951 consolidated with their many amendments, allowed for deferments, which again favored those individuals who were able to afford the cost of avoiding compulsory service.

Even though conscription had become a standard policy for military procurement, the fact that of the nearly two million men reaching draft age during the late 1960's only one-half to one-third of them would be needed, precipitated studies for alternatives to the Selective Service System. One such study was a Presidential board, the National Advisory Commission on Selective Service (referred to as the Marshall Commission after its Chairman, Burke Marshall) which

⁴ Cooper, R. V. L., op cit, p. 51.

was established by Executive Order of President Johnson in 1966. It was charged with considering the Selective Service System and its function in the past, present and prospective future in light of the following factors:

Fairness to all citizens; military manpower requirements; the objective of minimizing uncertainty and interference with individual careers and education; social, economic and employment conditions and goals; budgetary and administrative considerations; and any⁵ other factors that the Commission may deem relevant.

The Commission was also instructed to make recommendations for improvements in classification, selection, qualification, deferment and exemption of individuals and to evaluate alternatives to the draft. Although the study's findings rejected the feasibility of an All-Volunteer Force, it did recognize that improvements involving deferments were required.

The Marshall Commission gave high level consideration to the draft and blacks. Its findings are stated in the summary of its conclusions as follows:

The Commission gave careful study to the effect of the draft on and its fairness to the Negro. His position in the military manpower situation is in many ways disproportionate, even though he does not serve in the Armed Forces out of proportion to his percentage of the population.

⁵ The National Advisory Commission on Selective Service, In Pursuit of Equity: Who Serves When not All Serve? Washington, D.C.,: U.S. Government Printing Office, 1967, p.1.

He is underrepresented (1.3%) on local draft boards. The number of men rejected for service reflects a much higher percentage (almost 50%) of Negro men found disqualified than of whites (25%). And, yet, recent studies indicate that proportionately more (30%) Negroes of the group qualified for services are drafted than whites (18%) - primarily because fewer Negroes are admitted into Reserves or officer training programs. Enlistment rates for qualified Negroes and whites are about equal, but reenlistments for Negroes are higher: Department of Defense figures show that the rate of first-term reenlistments is now more than double that of white troops. Negro soldiers have a high record of volunteering for service in elite combat units. This is reflected in, but could not be said to be the sole reason for, the Negro's overrepresentation in combat (in terms of his proportion of the population): Although Negro troops account for only 11% of the total U.S. enlisted personnel in Vietnam, Negro soldiers comprise 14.5% of all Army units, and in Army combat units the proportion is, according to the Department of Defense, "appreciably higher" than that. During the first 11 months of 1966, Negro soldiers totalled 22.4% of all Army troops killed in action.⁶

Realizing that complete equity could never exist when only some men out of a large pool are inducted, the Commission sought a system which would operate as equitably as possible. Its recommendations included an impartial random selection for order of call, and a cancellation of the deferment system. All members of the Commission agreed that the deferment policy was most inequitable for it had gotten to the point that "what starts out as a temporary deferment for college enrollment is easily extended into a de facto exemption - by graduate school, by occupation, by fatherhood, and ultimately by the passage of time and advance of age."⁷

⁶ Ibid, p. 9

⁷ Ibid, p. 41.

The result of the study was the passage of the 1967 Military Selective Service Act which contained certain reforms - chiefly in the order of selection, which was reversed to take 19 year-olds and ex-college students first. Then, in 1969, President Nixon signed into law what was labeled the lottery system. It reduced the period of draft vulnerability from seven years to one year, the calendar year following an individual's 19th birthday. Draft selections would be made by drawing sequence numbers at random based on birth dates. A new drawing was held each year. Thus men were able to make career and family plans while being liable to a more equitable draft system for one year only. In 1970, by Executive Order, occupational and paternity deferments were phased out and in 1971 the Draft Extension and Military Pay Bill eliminated undergraduate student deferments for those entering college in the fall of 1971 and thereafter.

While this may have been a more equitable system, it was still conscription, and, in 1969, President Nixon appointed an Advisory Commission on the All-Volunteer Armed Force (referred to as the Gates Commission, after its Chairman, Thomas S. Gates, Jr.). The members were charged with developing a plan to eliminate conscription and move toward the All-Volunteer Force (AVF). Again, the equity issue was debated with the major objection being, that, with the recommended higher pay the force would be especially appealing

to blacks and the poor, and therefore a disproportionate number of blacks and lower-income whites would be in the military service.

The Commission projected that the enlistment rate of blacks would increase in the AVF but that it would not exceed 19%. By increasing military pay it was expected that the services would be a more attractive market for those having higher civilian earning potential. Due to the current mental, physical and moral standards, it was felt that the representativeness of the socioeconomic groups would not become disproportionate.

Subsequently, with the disengagement from Southeast Asia and the rapid reduction of military strength, draft calls were ended, and in June 1973 the draft authority expired.

Although the debate on the representative issue continues today with the inception of the AVF, the question as to criteria for representativeness is seldom addressed. Hunter and Nelson commenting on the racial composition of the Armed Forces stated:

The trend toward the increasing black content commenced during the draft era. This can be attributed in part to the dramatic increase in the proportion of blacks eligible for military services, specifically the increasing number of black high school graduates and the larger percentage of blacks placing in levels on the mental aptitude tests required for service entry. There is also the combined push of the disproportionately high unemployment rate among black youth and the pull of military services which may have gone further than other institutions

in offering equal opportunities for minorities.⁸

Secretary of Defense Melvin R. Laird corroborated these facts in a 1972 report to the President. He states that "the proportion of blacks and other racial minorities in the Armed Forces is expected to grow...(and) this proportion may exceed the percentage of minorities in the Nation's population, reflecting the apparent fact that minority members find better career opportunities and overall treatment in the military than in civilian life."⁹

In an economic analysis of manpower procurement, Canby examined the equity question in terms of regional representation within the selective service and lottery systems. The administrative procedures of the SSS allocated draft calls on the basis of geographic quotas which were in turn based on local population counts. This gave the appearance of geographic equity for those eligible for service when in fact there was a wide range of percentage differences. Wealthy

⁸ Hunter, R. W., and Nelson, G. R., The All-Volunteer Force. Has it worked? Will it work?, Paper prepared for the All-Volunteer Force versus Conscription Conference, Hoover Institution on War, Revolution and Peace, Stanford, 13-16 December 1979, p. 13.

⁹ U.S. Department of Defense, Office of the Secretary of Defense, Progress in Ending the Draft and Achieving the All-Volunteer Force (P.L. 92-129), Report to the President and the Chairman of the Armed Services Committees of the Senate and of the House of Representatives, Washington, D.C.: U.S. Government Printing Office, 1972, p. 25.

communities, where a large percentage of students and occupational deferments resulted in relatively few 1-A classifications, had low draft call quotas. Furthermore, low income states, which historically had shown a high rate of mental disqualifications, also had a low number of 1-A's and low quotas relative to the population. As a result "the midwestern prairie states, which had relatively low college attendance rates and the lowest mental disqualification rates (5-10%), were disproportionately burdened."¹⁰

Another problem which was inherent in the selective system was the proration of individuals due to enlistments. Since a geographic area's quota is reduced by its enlistments, "credits (due to enlistments) benefit poor areas with higher volunteer rates by reducing the draft's incidence upon the remainder. A locality's incidence of military service is thus determined by the size of its 1-A pool; its draft rate, by its 1-A pool and its enlistment credits."¹¹ In fact, due to the quirks in the administrative procedures, one draft board may have no inductions due to enlistment credits, while another board may induct a very high percentage of its eligible pool.

¹⁰ Canby, S. L., Military Manpower Procurement, Lexington, Mass: D. C. Heath and Company, 1972, p. 59.

¹¹ Ibid

Canby further describes the lottery as a simple workable system which "gives at best only an illusion of fairness."¹² Local quotas allowed for disparities in deferments and disqualification rates which in turn shifted the burden of the draft from one region to another. Although there were several problems with the lottery, the major issue was political in that the military was pressured to alter its acceptance criteria in order to obtain a more inclusive social representation. If the services were dissatisfied with the quality of random selectees, they were expected to set up special training programs. In essence, the lottery pressured the military to lower its acceptance standards and to upgrade selectees, rather than to reject low quality recruits and demand better replacements.¹³

Moskos and King discuss representation in terms of racial composition and education level. Moskos argues that these "quality" issues should be of major concern to the public emphasizing that the military today is not characteristically representative of the population of the United States. Using current force data he constantly evaluates the AVF by comparing the data with figures from the pre-Vietnam draft era, specifically 1964. Although he stresses "that the trend toward increasing

¹²Ibid, P.60

¹³Ibid

black content in the Army predates the All-Volunteer Force,"¹⁴ he fails to predict what the force make-up would be had the draft been allowed to continue. When describing educational levels, he shows concern for an increase in the percentage of lower educated whites combined with an increase in the number of blacks mentally eligible for enlistment. Again, Moskos fails to predict what these figures may have been had conscription not been discontinued.

King shows concern with how Americans perceive the composition of the military in terms of racial and educational mix. He contends that the issue is one of social context rather than one of effectiveness.¹⁵ Both Moskos and King fail to examine the representativeness of the military during the draft era in terms of several other relevant characteristics, such as socioeconomic status. While race and education are highly visible criteria, the issue involves more than just these "quality" factors.

¹⁴ Moskos, C.C. Jr., Serving in the Ranks: Citizenship and the All-Volunteer Force, Paper prepared for the All-Volunteer versus Conscription Conference, Hoover Institute on War, Revolution and Peace, Stanford, 13-16 December 1979, p.7.

¹⁵ King, W.R., Achieving America's Goals: National Service or the All-Volunteer Force?, Report prepared for the Committee on Armed Services, United States Senate, Ninety-Fifth Congress, First Session, Washington, D.C.: U.S. Government Printing Office, March 1977, pp. 27-31.

Cooper discusses representativeness in terms of socio-economic background and individual characteristics.¹⁶ Shields has intensively studied the issue during the Vietnam draft era and has discovered that unemployment, potential wages, residence, draft pressure, health and socioeconomic status are all relevant to volunteerism.¹⁷ The findings of both Cooper and Shields clearly show that representation in the military involves more than just the racial and educational issues. However, they too have failed to examine the actual characteristics of those individuals who did serve when selective service was law.

The commissions, studies, and critics discussed above base their suppositions on statistics relevant to their cause. While their findings concern issues involved with the debate on the AVF, not one study has questioned where the issue of representativeness might be today had conscription been allowed to continue. And, although it was commonly held that the draft provided a more equitable cross section of the American population, few studies have looked intensively at the representativeness of the Armed Forces prior to the end of the draft.

¹⁶ Cooper, R. V. L., op cit, pp. 204-231.

¹⁷ Shields, P.M., Enlistment During the Vietnam Era and the Representation Issue of the AVF, Unpublished manuscript, Ohio State University, 1979, pp. 16-27.

This thesis will examine the representativeness of the Armed Forces during the concluding years of the draft in terms of social characteristics as well as the quality issues discussed above.

III. METHODOLOGY

A. DATA BASE

The data used in this thesis were extracted from information collected in the National Longitudinal Surveys (NLS) conducted by the Center for Human Resource Research of Ohio State University under contract by the Office of Manpower Policy, Evaluation and Research (now the Office of Policy, Evaluation and Research of Manpower Administration) of the U.S. Department of Labor. The surveys involved a study of the labor market experience of four groups of the United States population: men 45-59 years of age, women 30-44, and young men and women 14-24. These four groups were selected because each faced different labor market problems. Studies were performed on each of the groups to identify characteristics that were important in explaining variations in several important facets of labor market experience. The variables included demographic, economic, attitudinal and social characteristics. Interviews were conducted yearly from 1966 through 1971 and again in 1973. The Bureau of Census was responsible for survey operations and data processing, while the Center for Human Resource Research analyzed the data and prepared reports on the survey.

It is from the young men group that the information for this thesis is extracted. The universe of the data

consists of men (14-24 years of age in 1966) who were randomly selected from the civilian non-institutionalized population. The sample was drawn from households in 235 areas that constituted the primary sampling units in an earlier experimental Monthly Labor Survey conducted for the Bureau of Labor Statistics between 1964 and 1966.

"In order to provide statistically reliable estimates for black youth and to permit a more confident analysis of differences in labor market experience and occupational aspirations between blacks and whites, the former were over-represented in the sample by a three-to-one ratio. The sample consists of 5,225 individuals, of whom 3,734 are white.¹⁸

Since the black population was approximately 12% at the time the survey was taken, and since no attempt in this thesis was made to weight the cases, results are presented separately by race in most instances. Interest is focussed on relative magnitude i.e., proportions, rather than absolute numbers. Accordingly, analysis of the data is presented in terms of percentages.

Included in the design of the NLS were questions concerning Armed Forces participation. Responses to these

¹⁸ U. S. Department of Labor, Manpower Administration, Career Thresholds (vol. 1), Washington D.C.: U.S. Government Printing Office, 1970, p. 3.

questions made it possible to determine who, in any given cohort group, had military service during the survey years. However, the NLS did not interview individuals while they were in the military, so the only way to obtain this information was from post-service responses. There is virtually no way to determine who was in the Armed Forces during the final year of the survey.

The cohort for this study was constructed from young men who were 14 through 17 years of age in 1966, and who had never served in the Armed Forces as of 1966. The maximum age of 17 was selected in order to get a truer picture of those in the survey who would be draft eligible during the NLS time frame. Anyone 18 or older would not be as susceptible to the draft since those year groups had already been tapped for a large number of inductions. The sample size of the cohort was N=1804 of which 429 (or 23.8%) were black.

The cohort was subsequently divided into two subgroups: (1) military (N=464) and (2) non-military (N=1340). The military included those young men who served in the Armed Forces for a period of at least six months after 1966 and who were discharged prior to 1973. The non-military subgroup included those men who had never served in the military during the same time.

Individual characteristics, which include education, mental aptitude, and race for the cohort were extracted from the NLS

and compared within each subgroup. Social variables, including geographic residence, Duncan index, Rotter scale and a constructed socioeconomic index were also compared between subgroups. Further comparisons of the same characteristics within the cohort by race and geographic region are included in order to obtain more insightful results. An analysis of the representative issue was conducted by empirically testing to confirm or disconfirm hypotheses about the equivalent relationship of the proportional distributions of each characteristic between the populations represented by the cohort subgroups.

B. STATISTICAL TECHNIQUE

Analysis of the available information was conducted through the use of frequency distributions of cases within contingency tables. This was accomplished with the use of the Statistical Package for the Social Sciences (SPSS) integrated computer program. The joint frequency distributions, called crosstabulations, were statistically analyzed by tests of significance using the Chi-square statistic, to determine whether or not the variables were statistically independent. A second test conducted was the Chi-square test of homogeneity.

C. DATA LIMITATIONS

As previously stated, the NLS did not survey anyone who was in the military in 1966, nor did it question anyone

initially surveyed while he was in the military. Therefore, there may be a number of the cohort who are still in the military in the last year of the survey. From the data available, there is no way to extract information concerning those unavailable for interview in 1973, nor is there any way to find out how many were in the military at that time.

Not everyone in the cohort answered each interview question. Therefore, many of the variables are not completely represented for the entire cohort and the total number will be less than $N=1804$, e.g. the question concerning method of entry into the Armed Forces. The number of individuals in the structured cohort who responded that they either enlisted or were drafted was so small that population distributions were untestable. Furthermore, there is no way to determine who enlisted due to draft pressure.

In summary, this thesis will examine and compare the individual and social characteristics of the military and non-military subgroups. In so doing, hypotheses will be tested to determine the relationships of the distributions of the characteristics for the military vis-a-vis civilian populations during the draft years, for which the cohort subgroups are treated as samples. Further analysis will involve comparing the same characteristics between inductees and enlistees, as described by the method of entry variable.

IV. REPRESENTATIVENESS

It is not always clear what the definition of representativeness entails. The issue, as was shown in the literature review, is usually discussed in terms of the relevant population with one or more economic or social variables used for comparison. However, unlike previous studies which often compared social characteristics of two remotely different cohorts, this thesis will examine individual and social characteristics of two subgroup populations, i.e., military and civilian, within one cohort population. The structure of this study involves: first, an inspection and comparison of seven characteristics: education, mental aptitude, race, geographic residence, Duncan index, Rotter scale, and a constructed socioeconomic index within each of two subgroups, military and non-military, of the cohort of 14-17 year-olds constructed from the NLS; and secondly, an inspection and comparison of multiple characteristics of the same two subgroups. An examination of the differences in the characteristics of inductees and enlistees follows in order to gain additional insight into how such characteristics vary with the method of entry in the military.

Hypotheses are constructed to test the significance of any differences in characteristics between populations represented by relevant subgroups. Results of the tests

are included here in the form of descriptive summaries. Tables are included to present the proportional distributions and to facilitate interpretation of differences in the distributions. Percentages in the tables, indicated by parentheses, are row percentages, unless otherwise indicated.

A. INDIVIDUAL CHARACTERISTICS OF MILITARY VERSUS NON-MILITARY

1. Education

Table 2 presents data on the number of years of school completed by 1973 for the cohort and the two subgroups: military and non-military. For the full cohort 86.4% had at least a high school education, and 46.4% had some college education. The participants in the military had a high school completion rate of 89.7% while the non-military group had a completion rate of 85.3%. Chi-square homogeneity tests show this difference in high school completion rate between military and non-military populations to be statistically significant ($\alpha=.013$). The proportion of military participants, 30.2%, who had some college education, however, is significantly ($\alpha=.0001$) lower than the non-military population, 52.1%.

These figures indicate that the military was not representative with respect to education attainment. In other words, the military had an overrepresentation of high school graduates and an underrepresentation of college educated individuals when compared with the civilian population. The

results support Cooper's findings¹⁹ and they substantiate the "quality" standards of the services; that is, the high school graduate is the most desirable recruit. The disparity in the percentages of young men with some college education is also not surprising, since student deferment was one way of avoiding the draft during the early years of the NLS.

TABLE 2

Cohort Years of School Completed, 1973

	< 12 years	12 years	>12 years
Military	48 (10.3)	276 (59.5)	140 (30.2)
Non-Military	197 (14.7)	445 (33.2)	697 (52.1)
TOTALS	245 (13.6)	721 (40.0)	837 (46.4)
$\chi^2 (2) = 99.75$; significance = 0.0000			

2. Mental Aptitude

During the NLS years, the Armed Forces measured the mental aptitudes of its recruits using the Armed Forces Qualification Test (AFQT) as a standard scoring device. The scores

¹⁹ Cooper, R. V. L., op cit, p. 208.

were based on percentiles and recruits were classified into one of five mental categories with Category I being the highest.

The NLS data does not contain records of AFQT scores. The mental ability distributions were represented by IQ scores, which have cultural biases. Table 3 presents the IQ scores of the cohort taken at about the 10th grade for each individual. The scores are partitioned into quintiles and are not the AFQT mental groups.

The figures show that the military subgroups had consistently higher proportions in each of the four lower quintiles. Although military IQ scores appear to be normally distributed, the lower two quintiles were significantly ($\alpha=.003$) over-represented, and the highest quintile was significantly ($\alpha=.0000$) underrepresented. Thus, the military was not representative of the civilian population in terms of mental ability.

TABLE 3
IQ Distribution

	Lower Fifth	4th Fifth	3rd Fifth	2nd Fifth	Upper Fifth
Military	53 (15.5)	74 (21.6)	81 (23.6)	76 (22.2)	59 (17.2)
Non-Military	121 (13.9)	130 (15.0)	181 (20.9)	168 (19.4)	268 (30.9)
TOTALS	174 (14.4)	204 (16.8)	262 (21.6)	244 (20.1)	327 (27.0)

$$\chi^2_{(4)} = 25.59; \text{significance} = 0.0000$$

3. Race

The most frequently used characteristic when describing social representation in the military is racial composition. Table 4 provides the data on the numbers of whites, blacks, and other races in each of the military and non-military subgroups. It should be reemphasized here that the blacks were oversampled in relation to their proportion in the population in order to obtain reliable statistics. Since all racial comparisons in this study are made with respect to participation rates of blacks and whites, the resultant comparisons are valid to the extent that sample cases accurately reflect blacks and whites in the population.

Summarizing the information, the blacks did have a higher participation rate in the military, 28.7%, when compared to the whites, 25.0%. Chi-square tests, however, show that the black participation rate for the population is not significantly different than the white participation rate ($\alpha=.062$).

4. Geographic Regions

Table 5 presents the cohort's 1966 census division of residence in terms of geographic regions. Chi-square tests showed that the military was statistically representative in each of the nine regions (at the .01 level).

In order to work with larger cell sizes, and in keeping with the pattern of previous studies concerning military issues, the geographic regions were reconstructed. This

TABLE 4
Racial Participation Rates

	Whites	Blacks	Others
Military	339 (25.0)	123 (28.7)	2 (10.5)
Non-Military	1017 (75.0)	306 (71.3)	17 (89.5)
TOTALS	1356	429	19

$$\chi^2(2) = 4.62; \text{ significance} = 0.0993$$

Notes:

1. Parentheses indicate column percentages.

time, the division was between South and non-South, the former being constructed from the South Atlantic, East South Central and West South Central regions. The non-South division included the remaining six areas.

Table 6 represents the reconstructed regions, describing the military participation rates in a more concise manner. The figures show that the two new regions are proportionately representative in the military and non-military subgroups. Further calculations found that the South military participation rate, 26.4%, was statistically ($\alpha=.30$) the same as the non-South rate, 25.3%. Therefore, the military was socially representative in terms of geographic residence, whether described by regions of South/non-South or by subdivisions of these regions.

TABLE 5

Census Division of Residence, 1966

	Military	Non-military
North East	13 (2.8)	48 (3.6)
Mid Atlantic	69 (14.9)	237 (17.7)
East North Central	83 (17.9)	260 (19.4)
West North Central	41 (8.8)	85 (6.3)
South Atlantic	111 (23.9)	268 (20.0)
East South Atlantic	45 (9.7)	125 (9.3)
West South Central	39 (8.4)	152 (11.3)
Mountain	15 (3.2)	33 (2.5)
Pacific	48 (10.3)	132 (9.9)
TOTALS	464 (25.7)	1340 (74.3)

$$\chi^2_{(8)} = 11.95; \text{ significance} = 0.1534$$

Notes:

1. Parentheses indicate column percentages, except totals.

TABLE 6
Geographic Regions, 1966

	Non-South	South
Military	269 (59.3)	195 (40.7)
Non-military	795 (58.0)	545 (42.0)
TOTALS	1064 (59.0)	740 (41.0)
$\chi^2(1) = 0.208$; significance = 0.6481		

5. Index of Socioeconomic Level of Parental Family

The socioeconomic index is a constructed variable attempting to describe the family background and environment in which the respondents grew up. The variable is based on the following five components: father's occupation, father's education, mother's education, education of oldest older sibling and availability of reading material in the home. Each of the components is mathematically assigned a coded number and when added together provides an index of family status. The larger the index, the higher the socioeconomic status. Index values range from 0 to 158 with lower values indicating a lower social status.

Table 7 shows the distribution of the index among the cohort broken into four levels. Both the military and non-military subgroups have the highest concentration of individuals between the index levels of 100 and 120. However, the military is significantly overrepresented ($\alpha=.0001$) below the index of 100 and underrepresented ($\alpha= .0001$) above 120.

The statistics indicate that the military population predominantly came from families with a lower social status when compared to the non-military population as measured by the socioeconomic index variable.

TABLE 7

Index of Socioeconomic Status of Parental Family

	INDEX LEVELS			
	0-80	81-100	101-120	121 Plus
Military	65 (14.7)	151 (33.9)	169 (38.0)	60 (13.5)
Non-military	194 (15.2)	319 (25.0)	485 (37.9)	280 (21.9)
TOTALS	259 (15.0)	470 (27.3)	654 (38.0)	340 (19.7)

$$\chi^2(3) = 21.69; \text{significance} = 0.0001$$

6. Rotter Scale

The Rotter Scale is an index constructed from a series of eleven questions attempting to measure an individual's locus of control; that is, the degree to which a person believes that his actions can influence his outcome in life. Responses to each question were assigned numerical values from one to four. The values are summed and those who have a lower index (minimum of 11) are classified as Internals. Internals believe their behavior to be relatively decisive in determining their fate. At the other end of the index scale (maximum of 44) are Externals, those who believe their behavior to be less decisive. They believe that chance, luck, or powerful agencies exert a very strong influence on what happens to them.²⁰

Table 8 lists the distribution of Rotter scale values for the cohort. Chi-square tests show that a significantly ($\alpha = .0000$) higher proportion of the military subgroups, 46.8%, was classified as most internal (index = 11-15). The mid-range values (16-30) were significantly underrepresented ($\alpha = .0000$) in the military, 74.9%, and a significantly ($\alpha = .007$) higher proportion, 6.9%, of the non-military subgroup was classified external (index = 31-44).

²⁰ Hamner, W.C., and Organ, D.W., Organizational Behavior, Dallas: Business Publications, Inc., 1978, pp. 176-177.

The figures indicate that the military population had a significantly larger number of individuals who believe that there was a strong orderly relationship between their behavior and its consequences (internal locus of control). The non-military population was significantly more externally oriented.

TABLE 8
ROTTER SCALE

	INDEX LEVELS				
	11-15	16-20	21-25	26-30	31-44
Military	217 (46.8)	80 (17.2)	95 (20.5)	55 (11.9)	17 (3.7)
Non-military	244 (18.2)	339 (25.3)	406 (30.3)	258 (19.3)	93 (6.9)
TOTALS	461 (25.6)	419 (23.2)	501 (27.8)	313 (17.4)	110 (6.1)

$$\chi^2 (4) = 148.56; \text{significance} = 0.0000$$

7. Duncan Index

The Duncan index is another socioeconomic status score derived from national surveys which ranked occupations according to social prominence and economic worth. Therefore,

an occupation which is regarded by society as being highly respectable and which receives a fairly large salary would receive a high Duncan index value. The index used in the NLS refers to the cohort member's head of household occupation and has a range of 0 - 96. Table 9 presents the Duncan index for the cohort. The military subgroup has a significantly ($\alpha = .0002$) higher percentage of low Duncan scores (index = 0-20), while the non-military subgroup has a significantly ($\alpha = .0002$) higher percentage of high scores (index = 61 plus). The midrange (21-60) are approximately the same between the two subgroups. Thus, the military population came from families whose fathers had less prominent occupations than the non-military population as measured by the Duncan index.

TABLE 9
Duncan Index

	INDEX LEVELS					
	0-20	21-30	31-45	46-60	61-70	71 Plus
Military	235 (54.9)	34 (7.9)	43 (10.0)	46 (10.7)	50 (11.7)	20 (4.7)
Non-Military	574 (46.4)	106 (8.6)	125 (10.1)	125 (10.1)	212 (17.2)	94 (7.6)
TOTALS	809 (48.6)	140 (8.4)	168 (10.1)	171 (10.3)	262 (15.7)	114 (6.9)

$$\chi^2(5) = 14.995; \text{significance} = 0.0104$$

B. MULTIPLE CHARACTERISTICS OF MILITARY VERSUS NON-MILITARY

1. Education by Race

As discussed previously, after describing the individual characteristics of the military and non-military subgroups of the cohort, further breakdown by race and geographic residence would be examined. Table 10 presents data on the number of school years completed by 1973 for the cohort, broken down by race. The table shows that 90.1% of the whites and 74.6% of the blacks had at least a high school education, with 51.7% of the whites and 28.7% of the blacks having had some college education. Closer examination shows that, within the white cohort, the military participant's high school completion rate, 91.4%, was not significantly ($\alpha = .18$) different from the non-military completion rate, 89.7%. The blacks with military service, on the other hand, had a significantly ($\alpha = .001$) higher high school completion rate, 84.6%, than the non-military blacks, 74.6%. The college experience rate was significantly ($\alpha = .002$) greater in the non-military population for both the whites, 57.5%, and blacks, 18.7%.

These figures support the earlier findings, in that the military is not representative with respect to education attainment. Noteworthy, however, is the fact that previous examination of the entire cohort found that the military population had a significantly higher high school graduation

rate than the non-military population. Within the blacks the same results were found, but the whites had a high school completion rate statistically comparable for both the military and non-military population. Therefore, the differences in the aggregate military/non-military high school completion rate is due to the overrepresentation of blacks with a high school education in the military.

2. Mental Aptitude by Race

When comparing Table 11 with Table 3, it is readily apparent that the IQ distributions were associated with racial differences. Whereas the blacks were concentrated in the lower two quintiles, 68.4%, the whites on the other hand, were more heavily represented in the upper two fifths, 53.6%.

Table 11 shows that the black IQ distribution in the population was not significantly different than in the military, while the IQ distribution for whites was significantly different ($\alpha = .0006$). The military whites were significantly under-represented ($\alpha = .0000$) in the upper fifth when compared with the non-military whites. Although the black IQ proportions were variable through the scale, the distribution of IQ's for blacks in the military were not significantly different (at the .05 level) from blacks in the population.

3. Geographic Regions by Race

The discussion previously concerning South/non-South participation rates found that the representativeness of

TABLE 10

Years of School Completed by Race, 1973

	WHITES		
	<12 years	12 years	>12 years
Military	29 (8.6)	193 (56.9)	117 (34.5)
Non-military	105 (10.3)	327 (32.2)	584 (57.5)
TOTALS	134 (9.9)	520 (38.4)	701 (51.7)

$$\chi^2 (2) = 67.30; \text{ significance} = 0.0000$$

	BLACKS		
	<12 years	12 years	>12 years
Military	19 (15.4)	81 (65.9)	23 (18.7)
Non-military	90 (29.4)	116 (37.9)	100 (32.7)
TOTALS	109 (25.4)	197 (45.9)	123 (28.7)

$$\chi^2 (2) = 27.64; \text{ significance} = 0.0000$$

TABLE 11
IQ Distribution by Race

WHITES					
	Lower Fifth	4th Fifth	3rd Fifth	2nd Fifth	Upper Fifth
Military	25 (9.1)	55 (20.0)	69 (25.1)	68 (24.7)	58 (21.1)
Non-military	59 (8.1)	104 (14.3)	153 (21.0)	156 (21.4)	256 (35.2)
TOTALS	84 (8.4)	159 (15.9)	222 (22.1)	224 (22.4)	314 (31.3)

$\chi^2(4) = 19.44$; significance = 0.0006

BLACKS					
Military	28 (41.8)	19 (28.4)	12 (17.9)	7 (10.4)	1 (1.5)
Non-military	62 (49.2)	23 (18.3)	26 (20.6)	11 (8.7)	4 (3.2)
TOTALS	90 (46.6)	42 (21.8)	38 (19.7)	18 (19.3)	5 (2.6)

$\chi^2(4) = 3.33$; significance = 0.5012

these geographic regions was not significantly different. Further breakdown by racial groups as illustrated in Table 12 shows that race had no impact on the distribution proportions. In fact, the white and black cohorts each had a more representative distribution than the population as a whole. This is explained by the fact that other races (N =19) are included in the total population cohort. Therefore, the military is statistically representative in terms of the South/non-South geographic regions for the full population and for both blacks and whites.

4. Index of Socioeconomic Level of Parental Family by Race

Reviewing the socioeconomic representativeness of the cohort, it was found that the lower index levels were over-represented and the higher levels were underrepresented in the military. When controlling for race the same results were statistically significant for the whites ($\alpha = .0005$). However, for the blacks the opposite was true. Table 13 shows that the military blacks were overrepresented (significantly at the .01 level) in the 100 plus index levels and underrepresented ($\alpha = .10$) below 100. The figures also indicate that a majority of the whites came from families with higher index levels, while the blacks came from families of lower index levels. Combining these observations, it is concluded that although the military population came from lower social index level families than the non-military population, the military blacks were proportionately

TABLE 12

Geographic Regions by Race, 1966

WHITES		
	Non-South	South
Military	739 (70.5)	100 (29.5)
Non-military	710 (69.8)	307 (30.2)
TOTALS	949 (70.0)	407 (30.0)

$$\chi^2(1) = 0.029; \text{ significance} = 0.8642$$

BLACKS		
	Non-South	South
Military	28 (22.8)	95 (77.2)
Non-military	69 (22.5)	237 (77.5)
TOTALS	97 (22.6)	332 (77.4)

$$\chi^2(1) = 0.0; \text{ significance} = 1.0000$$

TABLE 13

Index of Socioeconomic Status of Parental Family by Race

WHITES				
Index Levels				
	0-80	81-100	101-121	121 Plus
Military	29 (8.8)	101 (30.6)	144 (43.4)	56 (17.0)
Non-military	75 (7.6)	217 (21.9)	429 (43.2)	272 (27.4)
TOTALS	104 (7.9)	318 (24.0)	573 (43.3)	328 (24.8)

$$\chi^2(3) = 19.24; \text{significance} = 0.0002$$

BLACKS				
Military	36 (31.9)	48 (42.5)	25 (22.1)	4 (3.5)
Non-military	116 (43.1)	100 (37.2)	48 (17.3)	5 (1.9)
TOTALS	152 (39.8)	148 (38.7)	73 (19.1)	9 (2.4)

$$\chi^2(3) = 4.83; \text{significance} = 0.1845$$

underrepresented below the index of 100 and the military whites were overrepresented.

5. Rotter Scale by Race

The results described in Table 14 provide the same conclusions for the military and non-military population when controlled for by race, as those found for the entire population. That is, men in the military (whether white or black) were significantly ($\alpha = .0000$) more internal in the belief that their behavior is relatively decisive in determining their fate. There is however, a significantly (at the .05 level) larger percentage of blacks, 26.4%, who are classified as externals than whites, 22.5%.

6. Duncan Index by Race

The social status scores described by Duncan index for the cohort earlier in Table 9 were controlled mostly by the white population group. As indicated in Table 15, only 38.6% of the whites had fathers whose occupations were on the low end of the scale (0-20). The blacks on the other hand, had more than twice that proportion, 83.2%, with the same low range of values. The Duncan index distribution was statistically the same for black military and black non-military, whereas the low Duncan index for whites ($\alpha = .003$) was overrepresented in the military.

TABLE 14
Rotter Scale by Race

WHITES					
INDEX LEVELS					
	11-15	16-20	21-25	26-30	31-44
Military	158 (46.6)	60 (17.7)	69 (20.4)	41 (12.1)	11 (3.2)
Non-military	192 (18.9)	264 (26.0)	308 (30.3)	189 (18.6)	64 (6.3)
TOTALS	350 (25.8)	324 (23.9)	377 (27.8)	230 (17.0)	75 (5.5)

$$\chi^2(4) = 102.60; \text{significance} = 0.0000$$

BLACKS					
Military	58 (47.2)	20 (16.3)	26 (21.1)	13 (10.6)	6 (4.9)
Non-military	48 (15.7)	71 (23.2)	93 (30.4)	65 (21.2)	29 (9.5)
TOTALS	106 (24.7)	91 (21.2)	119 (27.7)	78 (18.2)	35 (8.2)

$$\chi^2(4) = 47.63; \text{significance} = 0.0000$$

TABLE 15

Duncan Index by Race

WHITES						
INDEX LEVELS						
	0-20	21-30	31-45	46-60	61-70	71 Plus
Military	144 (45.0)	29 (9.1)	37 (11.6)	41 (12.8)	50 (15.6)	19 (5.9)
Non-military	346 (36.4)	83 (8.7)	110 (11.6)	120 (12.6)	203 (21.3)	89 (9.4)
TOTALS	490 (38.6)	112 (8.8)	147 (11.6)	161 (12.7)	253 (19.9)	108 (8.5)

$$\chi^2(5) = 11.88; \text{significance} = 0.0364$$

BLACKS						
Military	90 (84.9)	5 (4.7)	6 (5.7)	4 (3.8)	0 (0.0)	1 (0.9)
Non-military	222 (82.5)	22 (8.2)	11 (4.1)	3 (1.1)	6 (2.2)	5 (1.9)
TOTALS	312 (83.2)	27 (7.2)	17 (4.5)	7 (1.9)	6 (1.6)	6 (1.6)

$$\chi^2(5) = 7.37; \text{significance} = 0.1944$$

7. Education by Geographic Region

Looking at the education of the cohort divided into the two respective South/non-South regions, it was found that the non-Southerners were better educated, both in terms of high school completion and in college experience ($\alpha = .0000$). Even so, the military subgroups in each of the regions are once again underrepresented in terms of college education, as discovered earlier for the entire cohort. But, the representativeness of high school graduates is significantly different from the cohort as a whole, when controlling for geographic regions. The completion rates between non-Southern military and non-Southern non-military was statistically the same ($\alpha = .237$). The Southern military, however, had a significantly ($\alpha = .0039$) higher completion rate, 87.2%, than the Southern non-military, 78.5%. Therefore, the overrepresentation of high school graduates in the military for the full population is a direct result of the overrepresentation of high school graduates in the military found in the Southern region. This is not surprising, since earlier in this study the military was found to have also been overrepresented in terms of black high school graduates. The blacks in the cohort constitute 45% of the Southerners, while the whites make up 91% of the non-Southern population. Therefore, the blacks have a significant impact on the Southern results, and very little effect on the non-Southern findings.

In summary, the military was underrepresented in terms of college education. When controlling the cohort by region and/or race, the same result was found. Yet, in terms of high school graduates, the military was found to be overrepresented. Again, when controlling for region, this was found to be true only in the South. The overrepresentation of Southern high school graduates in the military is due to an overrepresentation of Southern blacks and an overrepresentation of high school graduates in the black cohort.

TABLE 16

Years of School Completed by Geographic Region by Race, 1973

COHORT						
SOUTH			NON-SOUTH			
	< 12 Years	12 Years	> 12 Years	< 12 Years	12 Years	> 12 Years
Mili- tary	25 (12.8)	122 (62.6)	48 (24.6)	23 (8.6)	154 (57.2)	92 (34.2)
Non- military	117 (21.5)	191 (35.1)	236 (43.4)	80 (10.1)	254 (31.9)	461 (58.0)
TOTALS	142 (19.2)	313 (42.4)	284 (38.4)	103 (9.7)	408 (38.3)	553 (52.0)

$$\bar{\chi}^2(2) = 44.34; \text{ sig. } = 0.0000$$

$$\chi^2(2) = 55.90; \text{ sig. } = 0.0000$$

TABLE 16 (cont).

WHITES

	SOUTH			NON-SOUTH		
	<12 Years	12 Years	>12 Years	<12 Years	12 Years	>12 Years
Mili- tary	10 (10.0)	61 (61.0)	29 (29.0)	19 (7.9)	132 (55.2)	88 (36.8)
Non- military	44 (14.4)	103 (33.7)	159 (52.0)	61 (8.6)	224 (31.5)	425 (59.9)
TOTALS	54 (13.3)	164 (40.4)	188 (46.3)	80 (8.4)	356 (37.5)	513 (54.1)

$$\chi^2(2) = 23.61; \text{ sig.} = 0.0000$$

$$\chi^2(2) = 44.38; \text{ sig.} = 0.0000$$

BLACKS

Mili- tary	15 (15.8)	61 (64.2)	19 (20.0)	4 (14.3)	20 (71.4)	4 (14.3)
Non- military	73 (30.8)	88 (37.1)	76 (32.1)	17 (24.6)	28 (40.6)	24 (34.8)
TOTALS	88 (26.5)	149 (44.9)	95 (28.6)	21 (21.6)	48 (49.5)	28 (28.9)

$$\chi^2(2) = 20.30; \text{ sig.} = 0.0000$$

$$\chi^2(2) = 7.72; \text{ sig.} = 0.0211$$

8. Mental Aptitude by Geographic Region

When controlling the IQ distribution for geographic regions it was found that the South was statistically well represented ($\alpha = .1885$). Additional Chi-square tests showed that while the Southern military was well-represented in the highest quintile, the non-Southern military was under-represented (at the .01 level). Table 17 shows that Southerners as a whole were concentrated more in the lower three fifths, while the non-Southerners had a higher proportion in the upper two-fifths. These results were as expected, since blacks had a dynamic impact on the South population and the distributions were pretty much the same as those found when race was the controlling variable.

The figures correspond somewhat with the education variable. They indicate that those who had a lower IQ value also tended to have a lesser amount of education, namely the Southern blacks. The figures also support that racial biases may be evident in the IQ tests since the overall black scores were well below the white scores, regardless of geographic region.

9. Index of Socioeconomic Level of Parental Family by Geographic Region

After reviewing the socioeconomic status of the cohort, where the military was significantly overrepresented in the levels below 100 and underrepresented in the levels above 120;

TABLE 17

IQ Distribution by Geographic Region by Race

SOUTH POPULATION

	Lower Fifth	4th Fifth	3rd Fifth	2nd Fifth	Higher Fifth
Military	30 (23.1)	34 (26.2)	28 (21.5)	20 (15.4)	18 (13.8)
Non-military	74 (25.3)	52 (17.7)	59 (20.1)	45 (15.4)	63 (21.5)
TOTALS	104 (24.6)	86 (20.3)	87 (20.6)	65 (15.4)	81 (19.1)

$$\chi^2(4) = 6.15; \text{ significance} = 0.1885$$

SOUTH WHITES

Military	10 (12.0)	21 (25.3)	19 (22.9)	15 (18.1)	18 (21.7)
Non-military	24 (11.7)	37 (18.0)	44 (21.5)	42 (20.5)	58 (28.3)
TOTALS	34 (11.8)	58 (20.1)	63 (21.9)	57 (19.8)	76 (26.4)

$$\chi^2(4) = 2.76; \text{ significance} = 0.5996$$

TABLE 17 (cont.)

SOUTH BLACKS

	Lower Fifth	4th Fifth	3rd Fifth	2nd Fifth	Higher Fifth
Military	20 (42.6)	13 (27.7)	9 (19.1)	5 (10.6)	0 (0.0)
Non-military	50 (57.5)	15 (17.2)	15 (17.2)	3 (3.4)	4 (4.6)
TOTALS	70 (52.2)	28 (20.9)	24 (17.9)	8 (6.0)	4 (3.0)

$$\chi^2(4) = 7.75 ; \text{significance} = 0.1012$$

NON-SOUTH POPULATION

Military	23 (10.8)	40 (18.8)	53 (24.9)	56 (26.3)	41 (19.2)
Non-military	47 (8.2)	78 (13.6)	122 (21.2)	123 (21.4)	205 (35.7)
TOTALS	70 (8.9)	118 (15.0)	175 (22.2)	179 (22.7)	246 (31.2)

$$\chi^2(4) = 20.01; \text{significance} = 0.0005$$

TABLE 17 (cont.)

NON-SOUTH WHITES					
	Lower Fifth	4th Fifth	3rd Fifth	2nd Fifth	Higher Fifth
Military	15 (7.8)	34 (17.7)	50 (26.0)	53 (27.6)	40 (20.8)
Non-military	35 (6.7)	67 (12.8)	109 (20.8)	114 (21.8)	198 (37.9)
TOTALS	50 (7.0)	101 (14.1)	159 (22.2)	167 (23.4)	238 (33.3)

$$\chi^2(4) = 18.60; \text{significance} = 0.0009$$

NON-SOUTH BLACKS					
Military	8 (40.0)	6 (30.0)	3 (15.0)	2 (10.0)	1 (5.0)
Non-military	12 (30.8)	8 (20.5)	11 (28.2)	8 (20.5)	0 (0.0)
TOTALS	20 (33.9)	14 (23.7)	14 (23.7)	10 (16.9)	1 (1.7)

$$\chi^2(4) = 4.62; \text{significance} = 0.3289$$

and the socioeconomic status by race, where the blacks were overrepresented in the military above the index of 120 and underrepresented below 100, it was expected that socioeconomic trends associated with the cohort as a whole and the South would follow the trends associated with the blacks. Table 18 shows that the conclusions concerning the non-South were as expected. The non-Southern military was significantly ($\alpha = .004$) overrepresented below the value of 100 and significantly ($\alpha = .0000$) underrepresented above 120. The Southern results, however, were not as expected. The military subgroup here, as found in the non-Southern population, was significantly ($\alpha = .047$) overrepresented below 100 and significantly ($\alpha = .021$) underrepresented above the index of 120.

There were also no regional differences in white socioeconomic representation in the military. The whites, whether from the South or non-South were consistently overrepresented in the military below the index level of 100, and underrepresented above the level of 120 (at the .05 level).

The non-Southern blacks, on the other hand, were significantly well represented by the socioeconomic index across the range of index values (at the .05 level). The Southern blacks however, were again significantly underrepresented in the military below the index level of 80 ($\alpha = .04$).

TABLE 18

Index of Socioeconomic Status of Parental Family
by Geographic Region by Race

		COHORT				
SOUTH		NON-SOUTH				
INDEX LEVELS		INDEX LEVELS				
0-80	81-100	100-120	121 Plus	0-80	81-100	101-120 121 Plus
Military	54 (29.8)	66 (36.5)	43 (23.8)	18 (9.9)	11 (4.2)	85 (32.2) 126 (47.7) 42 (15.9)
Non-Military	157 (31.2)	141 (28.0)	125 (24.8)	81 (16.1)	37 (4.8)	178 (23.0) 360 (46.5) 199 (25.7)
TOTALS	211 (30.8)	207 (30.2)	168 (24.5)	99 (14.5)	48 (4.6)	263 (25.3) 486 (46.8) 241 (23.2)

 $\chi^2(3) = 6.77$; significance = 0.0797

 $\chi^2(3) = 14.94$; significance = 0.0019

TABLE 18 (cont.)

WHITES									
SOUTH					NON-SOUTH				
INDEX LEVELS					INDEX LEVELS				
0-80	81-100	101-120	121 Plus		0-80	80-100	101-120	121 Plus	
Military	20 (20.8)	31 (32.3)	30 (31.3)	15 (15.6)	9 (3.8)	70 (29.9)	114 (48.7)	41 (17.5)	
Non- military	52 (17.5)	71 (23.9)	96 (32.3)	78 (26.3)	23 (3.3)	146 (21.0)	333 (47.8)	194 (27.9)	
TOTALS	72 (18.3)	102 (26.0)	126 (32.1)	93 (23.7)	32 (3.4)	126 (23.2)	447 (48.1)	235 (25.3)	

 $\chi^2(3) = 5.89$; significance = 0.1166

 $\chi^2(3) = 13.63$; significance = 0.0035

TABLE 18 (cont.)

BLACKS									
SOUTH					NON-SOUTH				
INDEX LEVELS					INDEX LEVELS				
0-80	81-100	101-120	121 Plus		0-80	81-100	101-120	121 Plus	
Military	34 (40.0)	35 (41.2)	13 (15.3)	3 (3.5)	2 (7.1)	13 (46.4)	12 (42.9)	1 (3.6)	
Non- military	105 (51.0)	70 (34.0)	29 (14.1)	2 (1.0)	11 (17.5)	30 (47.6)	19 (30.2)	3 (4.8)	
TOTALS	139 (47.8)	105 (36.1)	42 (14.4)	5 (1.7)	13 (14.3)	43 (47.3)	31 (34.1)	4 (4.4)	

 $\chi^2(3) = 4.73$; significance = 0.1924

 $\chi^2(3) = 2.43$; significance = 0.4880

10. Rotter Scale by Geographic Region

The Rotter scale results by geographic region were the same as were found for the cohort. That is, the military population was significantly ($\alpha = .0000$) represented at the internal end of the scale. This is true for both the Southerners and non-Southerners, whether black or white. Therefore, statistically, people in the military believed that their behavior was decisive in determining their fate, with no regional effects.

TABLE 19

Rotter Scale by Geographic Region by Race

SOUTH POPULATION					
INDEX LEVELS					
	11-15	16-20	21-25	26-30	31-44
Military	86 (44.1)	37 (19.0)	44 (22.6)	21 (10.8)	7 (3.6)
Non-military	102 (18.7)	139 (25.5)	149 (27.3)	114 (20.9)	41 (7.5)
TOTALS	188 (25.4)	176 (23.8)	193 (26.1)	135 (18.2)	48 (6.5)

$$\chi^2(4) = 51.79; \text{significance} = 0.0000$$

TABLE 19 (cont.)

SOUTH WHITES					
INDEX LEVELS					
	11-15	16-20	21-25	26-30	31-44
Military	47 (47.0)	18 (18.0)	22 (22.0)	11 (11.0)	2 (2.0)
Non-military	66 (21.5)	77 (25.1)	84 (27.4)	62 (20.2)	18 (5.9)
TOTALS	113 (27.8)	95 (23.3)	106 (26.0)	73 (17.9)	20 (4.9)

$$\chi^2(4) = 25.97; \text{ significance} = 0.0000$$

SOUTH BLACKS					
Military	39 (41.1)	19 (20.0)	22 (23.2)	10 (10.5)	5 (5.3)
Non-military	36 (15.2)	61 (25.7)	65 (27.4)	52 (21.9)	23 (9.7)
TOTALS	75 (22.6)	80 (24.1)	87 (26.2)	62 (18.7)	28 (8.4)

$$\chi^2(4) = 27.80; \text{ significance} = 0.0000$$

TABLE 19 (cont.)

NON-SOUTH POPULATION					
INDEX LEVELS					
	11-15	16-20	21-25	26-30	31-44
Military	131 (48.7)	43 (16.0)	51 (19.0)	34 (12.6)	10 (3.7)
Non-military	142 (17.9)	200 (25.2)	257 (32.3)	144 (18.1)	52 (6.5)
TOTALS	273 (25.7)	243 (22.8)	308 (28.9)	178 (16.7)	62 (5.8)

$\chi^2(4) = 100.65$; significance = 0.0000

NON-SOUTH WHITES					
Military	111 (46.4)	42 (17.6)	47 (19.7)	30 (12.6)	9 (3.8)
Non-military	126 (17.7)	187 (26.3)	224 (31.5)	127 (17.9)	46 (6.5)
TOTALS	237 (25.0)	229 (24.1)	271 (28.6)	157 (16.5)	55 (5.8)

$\chi^2(4) = 78.85$; significance = 0.0000

TABLE 19 (cont.)

NON-SOUTH BLACKS					
INDEX LEVELS					
	11-15	16-20	21-25	26-30	31-44
Military	19 (67.9)	1 (3.6)	4 (14.3)	3 (10.7)	1 (3.6)
Non-military	12 (17.4)	10 (14.5)	28 (40.6)	13 (18.8)	6 (8.7)
TOTALS	31 (32.0)	11 (11.3)	32 (33.0)	16 (16.5)	7 (7.2)

$$\chi^2(4) = 23.66; \text{ significance} = 0.0001$$

11. Duncan Index by Geographic Region

Occupations of fathers vary by geographic residence. Although both regions had a large proportion of low status (0-20) jobs, the Southerners had a significantly ($\alpha = .0000$) higher percentage, 59.5%, than the non-Southerners, (41.0%). The military subgroup was overrepresentative at the lower end of the status scale in both regions (at the .05 level). Table 20 shows that the white proportions were significantly the same as was found for the population within each region. That is, they too were overrepresented at the lower end of

the scale (0-20), well represented in the mid-range values (21-60), and underrepresented at the upper end (61-plus).

The military blacks, on the other hand, were well represented in the non-South region across the range of values ($\alpha = .26$), and more so in the Southern region ($\alpha = .74$). Even though, it is interesting to note that the Southern blacks in total had fathers whose occupations were lower on the Duncan index, 86.7% in the 0-20 range, than the non-Southern blacks, 70.7% in the same range. This was statistically significant at $\alpha = .0003$. The white socioeconomic status was approximately the same regardless of regional differences.

TABLE 20
Duncan Index by Geographic Region by Race

SOUTH POPULATION						
INDEX LEVELS						
	0-20	21-30	31-45	46-60	61-70	71 Plus
Military	114 (65.1)	15 (8.6)	16 (9.1)	13 (7.4)	10 (5.7)	7 (4.0)
Non-military	291 (57.9)	34 (6.8)	32 (6.4)	41 (8.2)	74 (14.7)	31 (6.2)
TOTALS	405 (59.7)	49 (7.2)	48 (7.1)	54 (8.0)	84 (12.4)	38 (5.6)

$$\chi^2(5) = 12.82; \text{significance} = 0.0252$$

TABLE 20 (cont.)

SOUTH WHITES

INDEX LEVELS

	0-20	21-30	31-45	46-60	61-70	71 Plus
Military	40 (43.5)	12 (13.0)	12 (13.0)	12 (13.0)	10 (10.9)	6 (6.5)
Non-military	111 (38.0)	23 (7.9)	24 (8.2)	38 (13.0)	69 (23.6)	27 (9.2)
TOTALS	151 (39.3)	35 (9.1)	36 (9.4)	50 (13.0)	79 (20.6)	33 (8.6)

$$\chi^2(5) = 10.46; \text{significance} = 0.0632$$

SOUTH BLACKS

Military	74 (89.2)	3 (3.6)	4 (4.8)	1 (1.2)	0 (0.0)	1 (1.2)
Non-military	180 (85.7)	11 (5.2)	8 (3.8)	2 (1.0)	5 (2.4)	4 (1.9)
TOTALS	254 (86.7)	14 (4.8)	12 (4.1)	3 (1.0)	5 (1.7)	5 (1.7)

$$\chi^2(5) = 2.74; \text{significance} = 0.7397$$

TABLE 20 (cont.)

NON-SOUTH POPULATION

INDEX LEVELS

	0-20	21-30	31-45	46-60	61-70	71 Plus
Military	121 (47.8)	19 (7.5)	27 (10.7)	33 (13.0)	40 (15.8)	13 (5.1)
Non-military	283 (38.6)	72 (9.8)	93 (12.7)	84 (11.5)	138 (18.8)	63 (8.6)
TOTALS	404 (41.0)	91 (9.2)	120 (12.2)	117 (11.9)	178 (18.1)	76 (7.7)

$$\chi^2(5) = 9.88; \text{significance} = 0.0787$$

NON-SOUTH WHITES

Military	104 (45.6)	17 (7.5)	25 (11.0)	29 (12.7)	40 (17.5)	13 (5.7)
Non-military	235 (35.7)	60 (9.1)	86 (13.1)	82 (12.4)	134 (20.3)	62 (9.4)
TOTALS	339 (38.2)	77 (8.7)	111 (12.5)	111 (12.5)	174 (19.6)	75 (8.5)

$$\chi^2(5) = 8.94; \text{significance} = 0.1113$$

TABLE 20 (cont.)

NON-SOUTH BLACKS						
INDEX LEVELS						
	0-20	21-30	31-45	46-60	61-70	71 Plus
Military	16 (69.6)	2 (8.7)	2 (8.7)	3 (13.0)	0 (0.0)	0 (0.0)
Non-Military	42 (71.2)	11 (18.6)	3 (5.1)	1 (1.7)	1 (1.7)	1 (1.7)
TOTALS	58 (70.7)	13 (15.9)	5 (6.1)	4 (4.9)	1 (1.2)	1 (1.2)

$$\chi^2(5) = 6.54; \text{significance} = 0.2570$$

C. CHARACTERISTICS OF INDUCTEES VERSUS ENLISTEES

The previous sections described the characteristics of a specific age cohort during the years 1966 - 1973. The cohort was partitioned by race and geographic regions in order to measure representativeness in the military across several socioeconomic characteristics. This section describes differences in the characteristics of those who were drafted and those who enlisted into the Armed Forces.

The NLS inquired as to how those who were in the military had entered the Armed Forces. Two of the responses were

"draft" and "enlistment". The number of the previous cohort group selected who answered this question was very limited and it would make it impossible to extract a large enough sample for statistical reliability. Therefore, instead of sampling only the 1966 14-17 year-olds, the entire NLS (everyone who was 14-24 years of age in 1966) was used. The new cohort for examining the characteristics consisted of N=964 young men. It should be further stated, however, that it was impossible from the information provided to distinguish between a true enlistee and an enlistee who signed an obligation in order to avoid being drafted into the Army or Marine Corps. Cooper approximates that 60% of all enlistees were draft motivated.²¹

The enlistment program for the services had changed somewhat during the Vietnam era. The Army and Marine Corps each had a two-year program which gave those individuals who volunteered an opportunity for choice of training. The Navy likewise had what was called the two-by-six program which included two years of active duty and six years of reserve duty. A number of enlistees signed for these obligations to avoid being drafted into combat arms. In FY 1970, 23.5% of the Army enlistees, 40.9% of the Marine Corps recruits, and 30.1% of the Navy accessions were obligated for only two years of active duty.²²

²¹ Cooper, R. V. L., op cit, p. 20

²² U.S. Dept. of Defense, Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs), Information paper, 29 July 1979.

Shields, using the same NLS data, attempted to measure the effect of the draft on enlistment by the years of draft eligibility. Her draft pressure variable covered the years of highest draft calls, 1966, 1967, and 1968 and included the period an individual was most susceptible to induction - the year following a person's 18th birthday. Her enlistment variable included all those who responded to the method of entry questions as enlisting plus all those in the military who did not respond and had at least 26 months of active military service. This may be a good attempt to measure draft pressure, but it still falls short in describing the "true enlistee."

Shields found that "draft pressure had a strong and significant influence on the enlistment behavior of both racial groups. Nevertheless, its impact was greatest on white enlistment; 28% of the whites volunteered during the periods of high draft calls versus 22% of the blacks."²³

With these hypotheses in mind, this section will describe representativeness of the enlistee as compared to the draftee by describing the characteristics of only those individuals who actually answered either "draft" or "enlistment" as their method of entry on the interview questionnaire. Although, with

²³ Shields, P. M. op cit, p. 21.

today's All-Volunteer Force the comparisons may be mute, the description of the two groups may provide some insight into the composition of the Armed Forces should the country revert to a form of conscription at some future time.

1. Education

The education variable again is the number of years of school completed as of 1973 and is therefore a measure of total education, not just education prior to service entry. Table 21 presents the information for the new cohort of military veterans and shows that 87.4% had at least a high school education. The figures for veterans with some college education were higher than previously found since this new cohort had had a longer opportunity to take advantage of post-service education benefits.

When comparing the draftees with the enlistees it was found that both groups had ($\alpha = .41$) comparable proportions of high school graduates. A higher proportion of enlistees, 37.4%, attended college than draftees, 32.3%, however, Chi-square tests revealed no difference at the .05 level ($\alpha = .074$)

After separating the cohort into racial groups, the figures represented in Table 21 show that the whites had comparable proportions of enlistees and draftees who had a high school education ($\alpha = .30$) or some college education ($\alpha = .38$). The blacks, on the other hand, had a higher proportion of enlisted veterans, 27.0%, with college experience

than draftees, 16.1%. Because of small samples, Chi-square tests indicated that this difference again was not significant ($\alpha = .052$).

In conclusion, when describing educational attainment, a high percentage of veterans had a high school education. Significantly comparable proportions of white enlistees and draftees had college experience. The blacks, however, had a higher proportion of enlisted veterans than draftees with some college education. The numbers involved in the comparison are too small to confirm this difference as statistically significant at the .05 level, but it indicates that a relationship may exist between enlistment and college education for the black veteran.

2. Mental Aptitude

Table 22 describes the IQ distributions of the service veteran cohort. The proportions show that the IQ levels were the same (significant at the .05 level) in all quintiles except for the lower fifth where a higher percentage of draftees were distributed. White enlistees and white draftees had the same distribution ($\alpha = .79$) across the range of mental ability, while the black draftees showed a higher proportion in the lower quintiles ($\alpha = .01$). Although the numbers for the blacks were again small, those in the upper two IQ quintiles of the veteran population tended to enlist rather than be drafted ($\alpha = .03$).

TABLE 21

Method of Entry by Years of
School Completed, 1973, by Race

VETERANS			
	< 12 Years	12 Years	> 12 Years
Draftees	34 (12.2)	155 (55.6)	90 (32.3)
Enlistees	69 (12.7)	271 (49.9)	203 (37.4)
TOTALS	103 (12.5)	426 (51.8)	293 (35.6)

$$\chi^2(2) = 2.53; \text{ significance} = 0.2818$$

WHITES			
Draftees	19 (10.1)	94 (50.0)	75 (39.9)
Enlistees	55 (11.5)	239 (49.9)	185 (38.6)
TOTALS	74 (11.1)	333 (49.9)	260 (39.0)

$$\chi^2(2) = 0.29; \text{ significance} = 0.8665$$

TABLE 21 (cont.)

BLACKS

	<12 Years	12 Years	>12 Years
Draftees	15 (17.2)	58 (66.7)	14 (16.1)
Enlistees	14 (22.2)	32 (50.8)	17 (27.0)
TOTALS	29 (19.3)	90 (60.0)	31 (20.7)

$$\chi^2 (2) = 4.10; \text{significance} = 0.1287$$

In summary, black enlistment proportions were significantly below black draft proportions for the veteran with a low mental ability (the lower quintile). On the other hand, draft and enlistment proportions did not vary significantly across mental ability categories for whites.

TABLE 22

Method of Entry by IQ Distribution by Race

VETERANS

	Lower Fifth	4th Fifth	3rd Fifth	2nd Fifth	Higher Fifth
Draftees	60 (25.6)	56 (23.9)	62 (22.2)	35 (15.0)	31 (13.2)

TABLE 22(Cont.)

VETERANS (cont.)

	Lower Fifth	4th Fifth	3rd Fifth	2nd Fifth	Higher Fifth
Enlistees	71 (14.5)	124 (25.4)	123 (25.2)	94 (19.2)	77 (15.7)
TOTALS	131 (18.1)	180 (24.9)	175 (24.2)	129 (17.8)	108 (14.9)

 $\chi^2 (4) = 13.77$; significance = 0.0081

WHITES

Draftees	25 (14.7)	43 (25.3)	41 (24.1)	30 (17.6)	31 (18.2)
Enlistees	51 (11.8)	105 (24.3)	113 (26.2)	89 (20.6)	74 (17.1)
TOTALS	76 (12.6)	148 (24.8)	154 (25.6)	119 (19.8)	105 (17.4)

 $\chi^2 (4) = 1.68$; significance = 0.7936

BLACKS

Draftees	35 (58.3)	12 (20.0)	11 (18.3)	2 (3.3)	0 (0.0)
Enlistees	20 (37.0)	16 (29.6)	10 (18.5)	5 (9.3)	3 (5.6)
TOTALS	55 (48.2)	28 (24.6)	21 (18.4)	7 (6.1)	3 (2.6)

 $\chi^2 (4) = 8.70$; significance = 0.0689

3. Race

Although the individual characteristics of the veteran cohort have been described to this point by race, it is important to examine the question of entry method in order to determine the effects of race. Table 23 lists the proportions of whites and blacks who were either drafted or enlisted. Percentages in this case are column percentages. It is evident and statistically significant ($\alpha = .0000$) that black veterans have a much higher incidence of being drafted, 54.4%, than whites, 27.1%. This indicates that the advantage of enlistment is being taken more often by the white participants in the military.

These figures support the evidence found by the Marshall Commission in 1966 that "proportionately more (30%) Negroes...are drafted than whites (18%)." ²⁴ The figures also indicate that this trend continued through the years of higher draft calls (during the height of the Vietnam War) at even greater proportions.

These findings are however, contrary to what Shields discovered using the same NLS data. She found that the propensity to enlist was equal for both the blacks and whites (approximately 19% of the total population). Why the disparity? The differences lie in the method of extraction of

²⁴ The National Advisory Commission on Selective Services, op cit, p. 9.

data and the method of comparison. Whereas this study used only the individuals who categorized themselves as either draftees or enlistees on the NLS method of entry questions, Shields included as volunteers all those who failed to respond to the question and had 26 or more months of active duty. Thus, her cohort may include draftees. Additionally, this study compares enlistees and draftees within the veteran cohort, while Shields compares enlistments only to the eligible population.

In summary, eligible blacks were much more susceptible to being drafted than whites. The education variable supports these findings since a higher proportion of whites had some college education and therefore could use the student deferment in greater proportions. Historically, whites had lower mental disqualification rates, as evidenced by IQ distributions, therefore providing a much larger white population from which to induct a relatively smaller proportion of individuals. Blacks, on the other hand, had a smaller eligible pool from which a relatively high percentage could be drafted.

4. Geographic Regions

Since the black veteran had a significantly higher likelihood of being drafted, and since the black population in the NLS was predominantly from the South, it was hypothesized that the Southerners would have a higher proportion of draftees

TABLE 23
Method of Entry by Race

	Whites	Blacks	Totals
Draftees	206 (27.1)	106 (54.4)	312 (32.6)
Enlistees	555 (72.9)	89 (45.6)	644 (67.4)
TOTALS	761	195	956

Notes:

1. Parentheses indicate column percentages.

than the non-Southerners. This was found to be statistically ($\alpha = .005$) correct as shown in the results described in Table 24. A high proportion, 38.2%, of all Southern veterans had been drafted while only 29.2% of the non-Southerners were inducted. But what was surprising, was that these results were not controlled by the blacks as expected. Both the Southern whites and blacks had a higher percentage of draftees, but neither racial group alone was significantly different between regions. Therefore, Southerners had a significantly higher proportion of veterans who were drafted than non-Southerners. And, although the Southern white and black veteran populations each had a higher proportion of draftees than their non-Southern counterparts, the difference was not

statistically significant (at the .05 level). This indicates that non-Southerners were able to use deferments as a way of avoiding the draft more often than Southerners, regardless of race.

TABLE 24

Method of Entry by Geographic Region by Race

VETERANS			
	Non-South	South	Totals
Draftees	185 (29.2)	131 (38.0)	316 (32.8)
Enlistees	434 (70.1)	214 (62.0)	648 (67.2)
TOTALS	619	345	964

$$\chi^2(1) = 6.21; \text{significance} = 0.0127$$

WHITES			
Draftees	141 (26.3)	65 (29.0)	206 (27.1)
Enlistees	396 (73.7)	159 (71.0)	555 (72.9)
TOTALS	537	224	761

$$\chi^2(1) = 0.48; \text{significance} = 0.4891$$

TABLE 24 (cont.)

BLACKS			
	Non-South	South	Totals
Draftees	40 (52.6)	66 (55.5)	106 (54.4)
Enlistees	36 (47.4)	53 (44.5)	89 (45.6)
TOTALS	76	119	195

$$\chi^2 (1) = 0.057; \text{ significance} = 0.8106$$

Notes:

1. Parentheses indicate column percentages

5. Index of Socioeconomic Level of Parental Family

Table 25 displays the distribution of veterans across the socioeconomic index levels. Examining the data, it was found that draftees were from families with lower index values (0 - 100). Within the white sector, the same result was found. The blacks, on the other hand, were significantly ($\alpha = .05$) well represented with respect to both draftees and enlistees. This was not surprising since almost three-fourths of the total blacks in the military were from low index families.

Therefore, the findings show that the socioeconomic index had an association with whether an individual enlisted or was drafted. Those with a lower index, especially the whites,

tended to be drafted. Those with higher levels used enlistment as a method of entry into the military.

TABLE 25

Method of Entry by Index of Socioeconomic Status
of Parental Family by Race

VETERANS				
INDEX LEVELS				
	0-80	81-100	101-121	121 Plus
Draftees	65 (22.0)	103 (34.8)	93 (31.4)	35 (11.8)
Enlistees	68 (11.2)	191 (31.4)	244 (40.1)	105 (17.3)
TOTALS	133 (14.7)	294 (32.5)	337 (37.3)	140 (15.5)

$\chi^2(3) = 24.28$; significance = 0.0000

WHITES				
Draftees	28 (14.1)	65 (32.7)	72 (36.2)	34 (17.1)
Enlistees	47 (9.0)	155 (29.5)	222 (42.3)	101 (19.2)
TOTALS	75 (10.4)	220 (30.4)	294 (40.6)	135 (18.6)

$\chi^2(3) = 5.80$; significance = 0.1218

TABLE 25 (cont.)

BLACKS				
INDEX LEVELS				
	0-80	81-100	101-120	121 Plus
Draftees	36 (38.7)	36 (38.7)	21 (22.6)	0 (0.0)
Enlistees	20 (25.3)	36 (45.6)	20 (25.3)	3 (3.8)
TOTALS	56 (32.6)	72 (41.9)	41 (23.8)	3 (1.7)

$$\chi^2(3) = 6.50; \text{ significance} = 0.0897$$

6. Rotter Scale

It was found earlier that the veteran consistently displayed beliefs that his behavior influenced his fate. Given a choice as to whether an individual would enlist or be drafted, it was hypothesized that the most internal individuals would tend to enlist rather than be inducted. The results in Table 26 disproved this hypothesis and they showed that draftees were significantly ($\alpha = .0000$) more internal (below the index level of 15). These same results were found when examining the veterans by race.

In summary, draftees consistently displayed significantly greater internal beliefs than enlistees that they have control of their fate. This was surprising since conscription is an external force which exerts strong influences on what happens to an individual.

TABLE 26
Method of Entry by Rotter Scale by Race

VETERANS					
INDEX LEVELS					
	11-15	16-20	21-25	26-30	31-44
Draftees	201 (63.6)	35 (11.1)	48 (15.2)	23 (7.3)	9 (2.8)
Enlistees	327 (50.5)	127 (19.6)	126 (19.4)	54 (8.3)	14 (2.2)
TOTALS	528 (54.8)	162 (16.8)	174 (18.0)	77 (8.0)	23 (2.4)

$$\chi^2(4) = 18.73; \text{ significance} = 0.0000$$

WHITES					
Draftees	124 (60.2)	25 (12.1)	37 (18.0)	14 (6.8)	6 (2.9)
Enlistees	275 (49.5)	117 (21.1)	106 (19.1)	44 (7.9)	13 (2.3)
TOTALS	399 (52.4)	142 (18.7)	143 (18.8)	58 (7.6)	19 (2.5)

$$\chi^2(4) = 10.24; \text{ significance} = 0.0366$$

TABLE 26 (cont.)

BLACKS					
INDEX LEVELS					
	11-15	16-20	21-25	26-30	31-44
Draftees	73 (68.9)	10 (9.4)	11 (10.4)	9 (8.5)	3 (2.8)
Enlistees	49 (55.1)	9 (10.1)	20 (22.5)	10 (11.2)	1 (1.1)
TOTALS	122 (62.6)	19 (9.7)	31 (15.9)	19 (9.7)	4 (2.1)

$$\chi^2(4) = 7.01; \text{significance} = 0.1353$$

7. Duncan Index

The Duncan index distributions described in Table 27 show that draftees had a significantly ($\alpha = .04$) greater proportion of individuals from low Duncan index families. Beyond the index of 20, however, the proportions of enlistees and draftees were statistically the same (at the .05 level). When testing for homogeneity among the races it was found that each race was well represented in both the draft and enlisted ranks across the entire range of values. But, since the blacks were highly concentrated in the low range (0-20). and since they accounted for 46.2% of the total veteran draftees and only 20.7% of the total enlistees in the same range, they had

a significant effect on the Duncan index distribution of the veteran population as a whole.

TABLE 27

Method of Entry by Duncan Index by Race

VETERANS						
INDEX VALUES						
	0-20	21-30	31-45	46-60	61-70	71 Plus
Draftees	159 (56.0)	26 (9.2)	21 (7.4)	31 (10.9)	39 (13.7)	8 (2.8)
Enlistees	301 (49.8)	55 (9.1)	64 (10.6)	70 (11.6)	96 (15.9)	19 (3.1)
TOTALS	460 (51.7)	81 (9.1)	85 (9.6)	101 (11.4)	135 (15.2)	27 (3.0)

$$\chi^2(5) = 4.22; \text{ significance} = 0.5179$$

WHITES						
Draftees	84 (43.3)	19 (9.8)	17 (8.8)	29 (14.9)	37 (19.1)	8 (4.1)
Enlistees	238 (45.6)	49 (9.4)	59 (11.3)	66 (12.6)	91 (17.4)	19 (3.6)
TOTALS	322 (45.0)	68 (9.5)	76 (10.6)	95 (13.3)	128 (17.9)	27 (3.8)

$$\chi^2(5) = 1.92; \text{ significance} = 0.8606$$

BLACKS						
Draftees	72 (83.7)	7 (8.1)	4 (4.7)	2 (2.3)	1 (1.2)	0 (0.0)
Enlistees	62 (78.5)	6 (7.6)	4 (5.1)	4 (5.1)	3 (3.8)	0 (0.0)
TOTALS	134 (81.2)	13 (7.9)	8 (4.8)	6 (3.6)	4 (2.4)	0 (0.0)

$$\chi^2(4) = 2.20; \text{ significance} = 0.6996$$

V. SUMMARY AND CONCLUSIONS

This thesis was concerned with the socioeconomic and quality representativeness of the military during the final seven years of Selective Service. The first part of the study provided a historical context of the draft as it evolved through its many stages to the time when the All-Volunteer Force was instituted. The question as to who will serve when not everyone serves has consistently been a major concern of the military, and has been a most important factor in the debate concerning the representativeness of the All-Volunteer Force.

The second part of the study examined individual and socioeconomic characteristics of a 1966 cohort of 14-17 year-olds extracted from the National Longitudinal Surveys of 1966 through 1973. These characteristics were compared within the cohort between two subgroups: (1) those who served in the military during the survey years, and (2) those who had no military experience. A detailed look at a veteran cohort comparing the same characteristics of draftees with those of enlistees was also undertaken. Results of the comparisons and conclusions derived from the findings are summarized in this chapter.

Within the cohort 34.6% of the young men had military service. Beginning with educational attainment it was found

that a significantly larger proportion of these veterans were high school graduates than were the civilians. However, more civilians had some college education, regardless of race or regional differences. Within racial groups, the black population had less educational attainment than the white population, but the black veteran population had a higher percentage of high school graduates than the black civilian population. Whites on the other hand, had comparable proportions of high school educated individuals in both the military and civilian populations.

Regional differences found that people from the South had less educational attainment than non-Southerners. The Southern veteran population, however, had a higher proportion of high school graduates while the non-Southern veteran population had a comparable proportion of high school graduates when compared with their respective civilian counterparts. In conclusion, the military was underrepresented in terms of college education, and overrepresented in proportions of high school graduates. This result follows directly from the overrepresentation of Southern black high school graduates who were in the military.

Regarding mental aptitude, results showed that the military was overrepresented in the lower quintiles of IQ scores and underrepresented in the highest quintile. With a racial breakdown, military blacks were well represented across the

distribution of IQ scores, while military whites were again underrepresented in the upper quintile. Regional differences again found the Southern population following the same trends as the blacks; that is, they were well represented across the distribution of scores. The non-Southern population, however, was underrepresented in the higher score range and overrepresented in the lower ranges. Conclusions drawn, therefore, were that the individual who had higher IQ scores was less apt to enter the military and that the military population was representative of the blacks and Southerners and unrepresentative of the whites and non-Southerners when compared with the civilian population.

Racial composition of the military was inspected by comparing participation rates within both the blacks and whites, and although the blacks had a higher percentage of their population in the military, the results were not significantly different. Therefore, for the cohort selected, the participation rates of the blacks in the military was statistically the same as for the whites. This result was as expected for the Gates Commission had found the same results during approximately the same time frame.

Results also showed that the military was well represented geographically. Race within each geographic region had no impact on the participation rates.

The socioeconomic characteristics however showed some differences. The military was not representative of the population since most of the veterans came from families with a lower socioeconomic index score. While the whites followed the trends of the population, the blacks were just the opposite. Military blacks were from higher socioeconomic indexed families than their civilian counterpart. The Duncan index also found the veteran overrepresented from families where the head of household scored on the low end of the scale. The black population, however, was well represented in the military. The white military population was not representative of the white civilian population. By regions, Southerners were well represented in the military while non-Southerners were underrepresented at the high index levels, and overrepresented at the low levels.

The Rotter scale results found the military population to have a higher proportion of individuals who believed that there was a strong, orderly relationship between their behavior and its consequences (internal locus of control). These same results were found when controlling for racial and regional differences.

After examination of the veteran cohort (which was comprised of all young men in the survey who answered the question on method of entry into the service) the following were found:

- (1) The enlistee gained higher educational attainment than the draftee.
- (2) Those veterans with lower mental ability, as measured by IQ scores, tended to be drafted rather than enlist. This was especially true for the black veteran,
- (3) The black veteran was more often a draftee, while the white veteran had a high incidence of enlistment.
- (4) Southerners had a higher proportion of draftees than non-Southerners.
- (5) Draftees came from families with both lower socioeconomic and Duncan index scores.
- (6) Draftees scored most internal on the Rotter scale.

Therefore, not only was the military under conscription unrepresentative of the population at large, draftees were even more unrepresentative when compared to enlistees. While the military veteran was overrepresented in terms of less education, lower IQ, and lower socioeconomic status, it was well representative in terms of race and geographic residence. Most of the differences found, however, were a direct result of the unrepresentativeness in the inducted veteran population. The enlisted population was much more representative of the civilian population.

This finding supports the hypothesis that conscription as a method of manpower procurement, did not result in a representative military and that it was the lower educated, less informed individual who was more likely to end up serving in the military. The results show that less well-educated, lower socioeconomic groups were more likely to be inducted. Perhaps fewer members of this sector of society could afford the costs involved in avoiding the draft, such as college deferment and draft-exempt occupations or had the ability and inclination to seek such draft avoidance activities.

BIBLIOGRAPHY

- Bachman, J.G., Blair, J.D., and Segal, D.R. The All-Volunteer Force. Ann Arbor: The University of Michigan Press, 1977.
- Canby, S.L. Military Manpower Procurement. Lexington, Mass: D.C. Heath and Company, 1972.
- Cooper, R.V.L. Military Manpower and the All-Volunteer Force (R-1450-ARPA). Santa Monica, CA.: The Rand Corp. September, 1977.
- Cooper, R.V.L. The All-Volunteer Force: Five Years Later. (P-6051). Santa Monica, CA.: The Rand Corp., December, 1977.
- Fisher, A.C. The Supply of Enlisted Volunteers for Military Service. Ann Arbor: University Microfilms, 1968 (Re-production no. 69-3064).
- Gerhardt, J.M. The Draft and Public Policy. Columbus: Ohio State University Press, 1971.
- Hamner, W.C., and Organ, D.W. Organizational Behavior. Dallas: Business Publications, Inc., 1978.
- Hunter, W.C., and Nelson, G.R. The All-Volunteer Force. Has it worked? Will it Work? Paper prepared for the All-Volunteer Force versus Conscription Conference, Hoover Institution on War, Revolution and Peace, Stanford, 13-16 December, 1979.
- King, W.R. Achieving America's Goals: National Service or the All-Volunteer Armed Force? Report prepared for the Committee on Armed Services, United States Senate, Ninety-fifth Congress, First session. Washington D.C.: U.S. Government Printing Office, March, 1977.
- King, W.R. The All-Volunteer Military: Viewpoints, Issues and Prospects. Paper prepared for the All-Volunteer Force versus Conscription Conference, Hoover Institution on War, Revolution and Peace, Stanford, 13-16 December 1979.
- Lingren, B.W., McElrath, G.W., and Berry, D.A. Probability and Statistics. New York: Macmillan Publishing Co., Inc. 1978.
- Moskos, C.C., Jr. The enlisted ranks in the All-Volunteer Army. In J.B. Keeley (Ed.), The All-Volunteer Force and American Society. Charlottesville: University Press of Virginia, 1978.

- Moskos, C.C., Jr. National Service and the All-Volunteer Force. Statement prepared for the Subcommittee on Military Personnel, Armed Services Committee, U.S. House of Representatives, Washington, D.C., 14 February 1979.
- Moskos, C.C., Jr. Serving in the Ranks: Citizenship and the All-Volunteer Force. Paper prepared for the All-Volunteer versus Conscription Conference, Hoover Institution on War, Revolution and Peace, Stanford, 13-16 December 1979.
- The National Advisory Commission on Selective Service. In Pursuit of Equity; who Serves When Not All Serve? Washington, D.C.: U.S. Government Printing Office, 1967.
- Nie, N.H., and others. Statistical Package for the Social Sciences (2nd ed.). New York: McGraw-Hill, 1975.
- The report of the President's Commission on an All-Volunteer Armed Force. Washington, D.C.: U.S. Government Printing Office, 1979.
- Shields, P.M. Enlistment During the Vietnam Era and the Representation Issue of the AVF. Unpublished manuscript, Ohio State University, 1979.
- Shields, P.M. Armed Forces Labor Supply During the Vietnam Era. Paper presented at the 1979 annual meeting of the Southwestern Society of Economists, Houston, 14-17 March 1979.
- Statistical Abstract of the United States (1976). Washington, D.C.: U.S. Government Printing Office, 1977.
- U.S. Department of Defense, Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs). Information paper, 29 July 1970.
- U.S. Department of Defense, Office of the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics). America's Volunteers: a Report on the All-Volunteer Armed Forces. Washington, D.C.: Author, 1978.
- U.S. Department of Defense, Office of the Secretary of Defense. Progress in Ending and Draft and Achieving the All-Volunteer Force (P.L. 92-129). Report to the President and the Chairman of the Armed Services Committees of the Senate and of the House of Representatives. Washington, D.C.: U.S. Government Printing Office, 1972.
- U.S. Department of Labor, Manpower Administration. Career Thresholds (vol. 1). Washington, D.C.: U.S. Government Printing Office, 1970.

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